

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028367**Date Inspected:** 09-Sep-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Salvador Merino**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 12E-PP111.1-C1 drop-in side plate outside, QA randomly observed ABF/JV qualified welder Rick Clayborn continuing to perform CJP groove welding repair on a Seismic Performance Critical Member (SPCM) due to Ultrasonic Testing (UT) detected defect on welded splice butt joint. The welder was given approval to excavate one repair per Caltrans approved Request for Weld Repair (RWR) #201209-066. The welder preheated the repair area and its vicinity to >225°F prior excavation and then ground smooth the groove of the excavation. After its completion, ABF QC Salvador Merino performed Magnetic Particle Testing (MT) on the removal of the defect with no relevant defect noted during the test.

The welder was noted using propylene gas torch to preheat the repair area and its vicinity to 325°F and as soon as the required temperature was attained the welder started performing the welding repair. Welder Rick Clayborn was observed manually welding in 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode implementing Caltrans approved welding procedure ABF-WPS-D15-1004 Repair. Welder Rick Clayborn was noted welding repair at Y=520mm having boat shape excavation profile of 140mm long x 20mm wide x 11mm deep. During welding, ABF QC Salvador Merino was noted monitoring the welders' welding parameter with measured working current of 143 amperes on the 3.2mm diameter E7018H4R electrode. After the welding completion, the another ABF personnel performed the Post Weld Heat Treatment (PWHT) of 450°F using propylene gas torch and held it for one hour as required. The welder has moved to OBG 13W-PP123.

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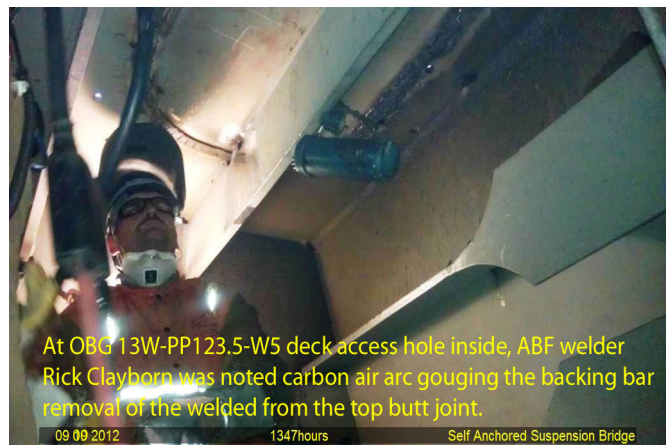
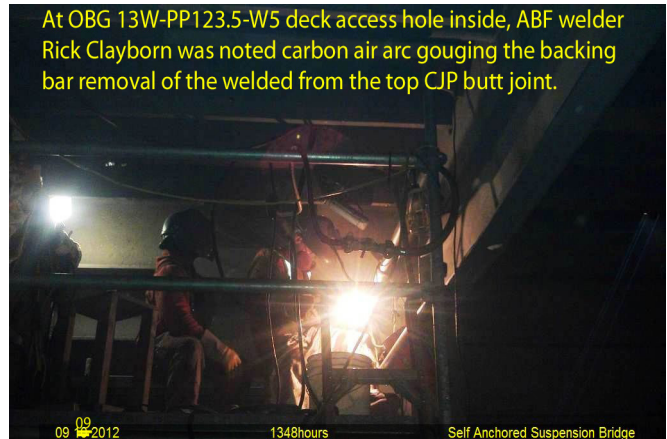
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5-W5 deck access hole.

At OBG 13W-PP123.5-W5 deck access hole inside, the same welder was noted removing the backing bar using carbon air arc gouging. After the removal of the backing bar, the welder also carbon air arc gouged the back side of the (welded root pass to cover pass from the top) CJP butt joint and followed with smooth grinding before ABF QC John Hayes performed Magnetic Particle Testing (MT) on the backing bar removal. The welder performed 4G (overhead) back welding fill pass using 3.2mm diameter E7018H4R electrode implementing Caltrans approved welding procedure specification ABF-WPS-D15-1110A Rev. 1 until the end of the shift. Fill pass back welding should remain tomorrow.

At the request of Quality Control Field Supervisor, Bonifacio Daquinag, QA has randomly verified the QC VT/MT on the CJP/fillet welding of various field welds. The QA verification was performed to verify that the welding and the VT/MT inspection performed by the QC inspector meet the requirements of the contract documents. At the conclusion of the QA verification it appeared that the welds and the QC inspection complied with the contract documents.

1. 12E-PP16.5-E5 LSW longitudinal stiffener inside - splice butt joint weld cover QA verified.
2. 13W-WK retrofit stiffener – 8mm fillet weld both sides cover QA verified.



Summary of Conversations:

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No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito
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Quality Assurance Inspector

Reviewed By:	Levell, Bill
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QA Reviewer
